

REMARKS

Claims 1-7 are pending in this application after this amendment. Claims 1 and 5 are independent. New claims 6-7 are presented for consideration by the Examiner. No new matter has been added by the addition of these new claims. In light of the amendments and remarks included herein, Applicants respectfully request reconsideration and withdrawal of the outstanding rejections.

By this amendment, Applicants have amended the claims to more appropriately recite the present invention. These amendments are being made without conceding the propriety of the Examiner's rejections, but merely to timely advance prosecution of the present application.

In the outstanding Official Action, the Examiner rejected claim 4 under 35 U.S.C. §112, second paragraph; rejected claims 1-2 under 35 U.S.C. §102(b) as being anticipated by *Sasamoto et al.* (USP 6,324,374); rejected claims 3 and 5 under 35 U.S.C. §103(a) as being unpatentable over *Sasamoto et al.* in view of *Mizoguchi et al.* (USP 6,470,166); and rejected claim 4 under 35 U.S.C. §103(a) as being unpatentable over *Sasamoto et al.* in view of allegedly well-known art. Applicants respectfully traverse these rejections.

Claim Rejections – 35 U.S.C. §112, second paragraph

The Examiner rejected claim 4 under 35 U.S.C. §112, second paragraph asserting the phrase “transfer unit is rotatable on the rotary fulcrum so that a distance between a first transfer member adjacent to a second transfer member closer to the rotary fulcrum,” is unclear.

By this amendment, Applicants have amended claim 4 to clarify that the first transfer member is adjacent to a second transfer member, the second transfer member being closer to the rotary fulcrum than the first transfer member. Based on this amendment, Applicants respectfully request the outstanding rejection be withdrawn.

Claim Rejections – 35 U.S.C. §102

The Examiner rejected claim 1 under 35 U.S.C. §102 asserting *Sasamoto et al.* anticipates the claimed invention. Specifically, the Examiner asserts that *Sasamoto et al.* discloses a transfer unit wherein the transfer unit has a rotary fulcrum (pivot subunit) in the vicinity of an extension of the axis of a transfer member (rollers) located on one end portion in the sheet transporting direction so as to be approximately parallel to the axis (figures 7-11; col. 6, lines 8-17; col. 7, lines 37-57; col. 12 line 58 – col. 13, line 57), and can be rotated on the rotary fulcrum in directions of moving to and from the image carriers (figures 7-11; col. 12 line 58 – col. 13, line 57). Applicants respectfully disagree with the Examiner's characterization of this reference.

The disclosure of *Sasamoto et al.* provides for an image forming apparatus that includes a pivot mechanism that temporarily separates the belt formed member from a part of the opposing members for color image formation (Abstract). At col. 12, line 57 through col. 12, line 21, *Sasamoto et al.* discloses as follows:

In the black and white image forming process illustrated in FIG. 7, the intermediate transfer belt 100 moves to a position where the intermediate transfer belt 100 is separated from the photoconductive drums 10Y, 10M and 10C while it remains in contact with only the photoconductive drum 10B for black color, the drum closest to a secondary transfer area, located at the right end in FIG. 7. A separation device, for moving the intermediate transfer belt 100 to the separated position, **pivotably moves a pivot subunit (not shown), to which shafts of the supporting rollers 71, 75, 76 and 80 and the primary transfer roller 77Y, 77M and 77C are attached, about the spanning roller 74** located between the photoconductive drums 10B and 10C, by a pivot mechanism (not shown), in a clockwise direction as indicated by arrow A in FIG. 7.

FIG. 8 explains a pivot mechanism of the pivot subunit 701 which is part of the intermediate transfer unit 70. The intermediate transfer unit 70 includes the pivotable pivot subunit 701 and a fixed subunit 702. Spanning rollers 75, 76 and 80, and primary transfer rollers 77Y, 77M and 77C are rotatably provided to a sideboard 701a of the pivot subunit 701. The primary transfer roller 77B for black color, the driving roller 72, the guide roller 73 and spanning rollers 74 and 78 are rotatably provided to a sideboard 702a of the fixed subunit 702. **The pivot subunit 701 pivots about the shaft of the fixed spanning roller 74.** Above the spanning roller 74, an oblong hole 701b for the pivot is provided on the sideboard 701a so that a guide pin 702b provided to the fixed subunit 702

passes through the oblong hole 701b. When the pivot subunit 701 pivots, the guide pin 702b guides the pivoting of the pivot subunit 701. (emphasis added)

As can be seen from the above disclosure, *Sasamoto et al.* discloses that the pivot subunit pivots about the shaft of the fixed spanning roller.

Applicants respectfully submit that the Examiner's interpretation of the pivot subunit to teach the rotary fulcrum is improper. Operation of the pivot subunit moves the intermediate transfer belt to a separation position. It appears that the Examiner may be considering the spanning roller 74 to teach the rotary fulcrum.

Second, Applicants respectfully submit that the spanning roller 74 is insufficient to teach the rotary fulcrum as claimed. The invention of claim 1 recites "wherein the transfer unit has a rotary fulcrum in the vicinity of an extension of the axis of a transfer member located on one end portion in the sheet transporting direction so as to be approximately parallel to the axis, and can be rotated on the rotary fulcrum in directions of moving to and from the image carriers." If the Examiner is interpreting the spanning roller to teach the rotary fulcrum, the spanning roller is not in the vicinity of an extension of the axis of a transfer member located on one end portion in the sheet transporting direction. The spanning roller appears to extend the width of the transfer belt.

Third, the pivot subunit is insufficient to teach or suggest the rotary fulcrum, as the transfer belt is not rotated on the pivot subunit, i.e., "rotated on the rotary fulcrum in directions of moving to and from the image carriers," as required by claim 1.

By this amendment, Applicants have amended claim 1 to recite wherein a distance between any two of the transfer members stays constant during a rotation of the transfer unit. Applicants respectfully submit that *Sasamoto et al.* fails to teach or suggest this newly added claim element in conjunction with the other claim elements as recited.

As such, Applicants respectfully submit that *Sasamoto et al.* fails to teach or suggest the rotary fulcrum as claimed and, as such, claim 1 is not anticipated by *Sasamoto et al.* Applicants

respectfully submit that claims 2-4 and 6-7 are allowable for the reasons set forth above with regard to claim 1 at least based on their dependency on claim 1.

Claim Rejections – 35 U.S.C. §103 – *Sasamoto et al./ Mizoguchi et al.*

In support of the Examiner's rejection of claim 5, the Examiner admits that *Sasamoto et al.* fails to teach or suggest a supporter for supporting the transfer members so as to be rotatable and movable in a radial direction, wherein the supporter has a rotary fulcrum in the vicinity of an extension of the axis of a transfer member located at one end portion in a direction in which the transfer members are juxtaposed, so as to be approximately parallel to the axis. The Examiner asserts that *Mizoguchi et al.* cures the deficiencies of the teachings of *Sasamoto et al.* by asserting "Mizoguchi et al. discloses a supporter for supporting the transfer members (i.e. rollers) so as to be rotatable and movable in a radial direction (see figures 2-5; col. 5 line58 – col. 7, line 30). Mizoguchi further discloses that the supporter is a part of the transfer belt unit (see col. 6, lines 50-53)." Applicants respectfully disagree with the Examiner's characterization of the references and further disagree that these references are properly combinable.

At the outset, while the Examiner admits that *Sasamoto et al.* fails to teach or suggest a supporter having a rotary fulcrum in the vicinity of an extension of the axis of a transfer member, the Examiner does not address this claim element when discussing the teachings of *Mizoguchi et al.* *Mizoguchi et al.* fails to teach or suggest this claim element. If the Examiner maintains his rejection of this claim, Applicants respectfully request proper consideration of this claim element in a new, non-final Official Action so that Applicants may have a proper opportunity to respond.

The disclosure of *Mizoguchi et al.* is directed to a color image forming apparatus that includes a belt that is controlled to come into contact with the drums only while accepting the toner image from the drums.

At col. 6, lines 40-49, *Mizoguchi et al.* discloses as follows:

As described above, by engaging guide pin 15b of trigger 15 with guide 16Y having engaging stage 17Y and disengaging stage 18Y, trigger 15 can be rotatably operated according to the movement of guide 16Y in the rightward/leftward direction. This allows belt 3 to come into contact with or to keep away from drum 5a. The structure--operating first transfer roller 13Y to be rotatable about support pin 15a with the help of trigger 15 and guide 16Y--is also employed for other transfer rollers 13M, 13C, and 13B in the same way.

As can be seen from this disclosure, the trigger 15 is rotatably operated to move in the rightward/leftward direction in order to permit belt 1 to come in contact with, or keep away from, drum 5a.

In contrast, claim 5 recites a transfer unit including a supporter for supporting the transfer members so as to be rotatable and movable in a radial direction, wherein the supporter has a rotary fulcrum in the vicinity of an extension of the axis of a transfer member located at one end portion in a direction in which the transfer members are juxtaposed, so as to be approximately parallel to the axis. The trigger of *Mizoguchi et al.* is insufficient to teach or suggest the rotary fulcrum as the transfer unit does not rotate in a radial direction. Further, there is no disclosure in *Mizoguchi et al.* that is directed to the supporter including the rotary fulcrum, as claimed.

Further, even if the references were combined as suggested by the Examiner, the resultant device would not provide for a supporter having a rotary fulcrum. Still further, the teachings of the references are not properly combinable as they would require substantial reconstruction of the device, and further, would change the principle of operation of the device disclosed is *Sasamoto et al.*

With regard to claim 4, the Examiner has rejected the claim without providing any supplemental reference that teaches or suggests the range of 2.5 mm to 4 mm. As the Examiner has failed to provide any reference that teaches or suggests the claim elements. As such, the Examiner has failed to establish *prima facie* obviousness. It is respectfully requested that the outstanding rejection be withdrawn.

Conclusion

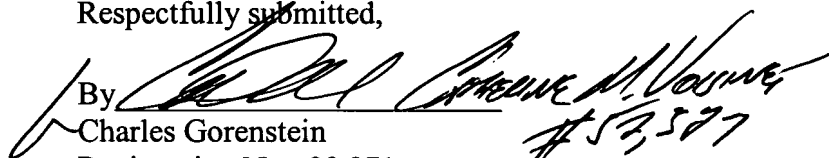
In view of the above remarks, it is believed that claims are allowable.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Catherine M. Voisin, Reg. No. 52,327, at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.14; particularly, extension of time fees.

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Respectfully submitted,

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